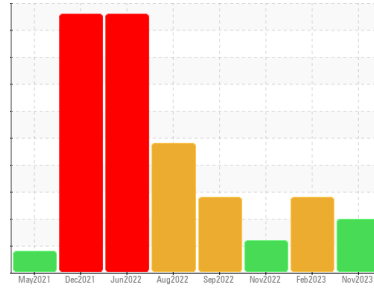




PROBLEM SUMMARY

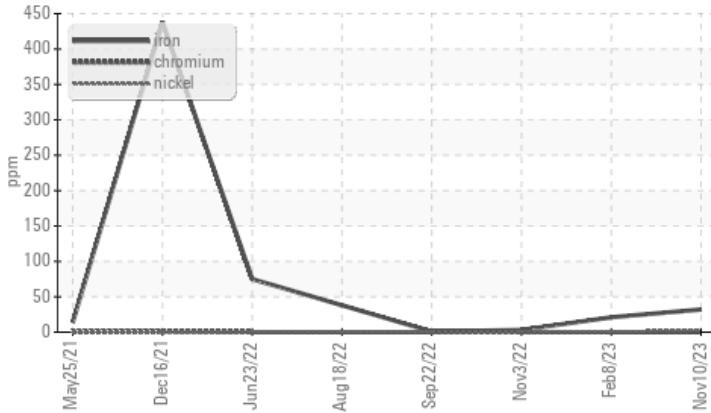
Area
COLD MILL/CM-3STD-2N
 Machine Id
Inspection Station HPU 3ST2 Inspection Station HPU
 Component
Hydraulic Power Pack
 Fluid
QUAKER CHEMICAL QUINTOLUBRIC 888-68 (200 GAL)

Sample Rating Trend

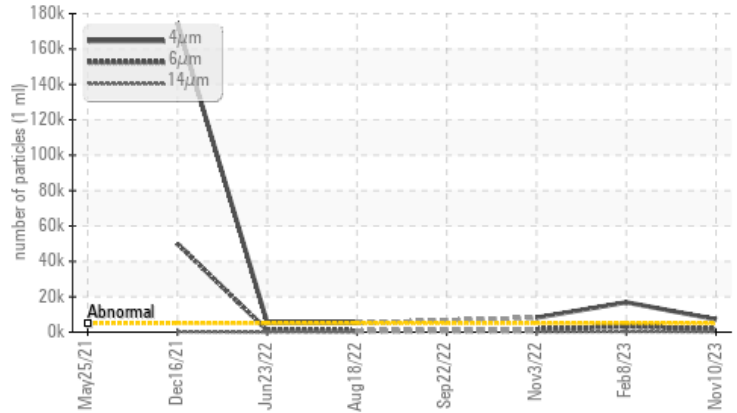


COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys



▲ Particle Trend



RECOMMENDATION

No corrective action is recommended at this time.
 Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ABNORMAL	ATTENTION
Iron	ppm	ASTM D5185m >20	▲ 32	▲ 21	3
Particles >4µm		ASTM D7647 >5000	▲ 7228	▲ 16870	▲ 8138
Particles >6µm		ASTM D7647 >1300	▲ 1807	▲ 3093	▲ 1667
Oil Cleanliness		ISO 4406 (c) >19/17/14	▲ 20/18/14	▲ 21/19/15	▲ 20/18/14

Customer Id: CONMUSAL
 Sample No.: KFS0004868
 Lab Number: 06007647
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

08 Feb 2023 Diag: Jonathan Hester

WEAR



We recommend you service the filters on this component. Resample at the next service interval to monitor. The iron level is abnormal. All other component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



03 Nov 2022 Diag: Don Baldrige

ISO



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report



22 Sep 2022 Diag: Don Baldrige

WATER



We advise that you check for the source of water entry. We recommend you service the filters on this component. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. Appearance is hazy. Moderate concentration of visible dirt/debris present in the oil. There is a moderate concentration of water present in the oil. The oil viscosity is lower than normal. The AN level is acceptable for this fluid.

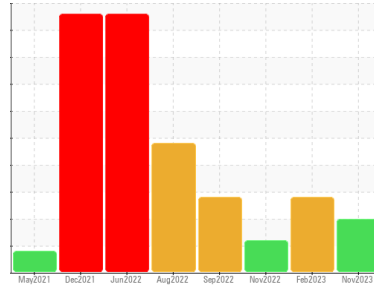
view report





OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
COLD MILL/CM-3STD-2N
Machine Id
Inspection Station HPU 3ST2 Inspection Station HPU
Component
Hydraulic Power Pack
Fluid
QUAKER CHEMICAL QUINTOLUBRIC 888-68 (200 GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

The iron level is abnormal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		KFS0004868	KFS0002536	KFS0001923
Sample Date	Client Info		10 Nov 2023	08 Feb 2023	03 Nov 2022
Machine Age	Client Info		0	0	0
Oil Age	Client Info		0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	ABNORMAL	ATTENTION

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m	>20	▲ 32	▲ 21	3
Chromium	ppm ASTM D5185m	>20	0	0	0
Nickel	ppm ASTM D5185m	>20	2	<1	0
Titanium	ppm ASTM D5185m		0	<1	<1
Silver	ppm ASTM D5185m		0	0	0
Aluminum	ppm ASTM D5185m	>20	0	<1	0
Lead	ppm ASTM D5185m	>20	0	0	0
Copper	ppm ASTM D5185m	>20	3	4	<1
Tin	ppm ASTM D5185m	>20	259	251	295
Vanadium	ppm ASTM D5185m		0	0	0
Cadmium	ppm ASTM D5185m		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	0	0	0	<1
Barium	ppm ASTM D5185m	0	0	0	0
Molybdenum	ppm ASTM D5185m	0	0	0	0
Manganese	ppm ASTM D5185m	0	0	<1	0
Magnesium	ppm ASTM D5185m	0	0	0	0
Calcium	ppm ASTM D5185m	10	0	3	0
Phosphorus	ppm ASTM D5185m	200	101	98	107
Zinc	ppm ASTM D5185m	125	74	35	0
Sulfur	ppm ASTM D5185m	1000	715	843	423

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m	>15	<1	2	<1
Sodium	ppm ASTM D5185m		2	2	1
Potassium	ppm ASTM D5185m	>20	0	0	0
Water	% ASTM D6304	>0.05	---	---	---
ppm Water	ppm ASTM D6304	>500	---	---	---

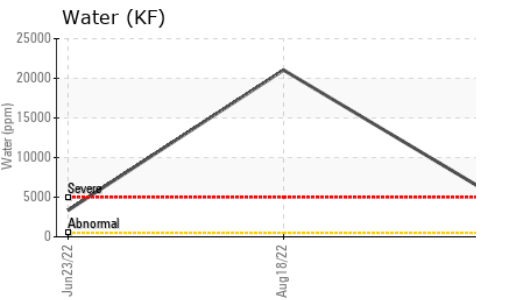
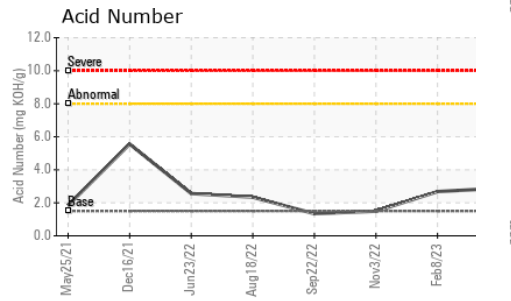
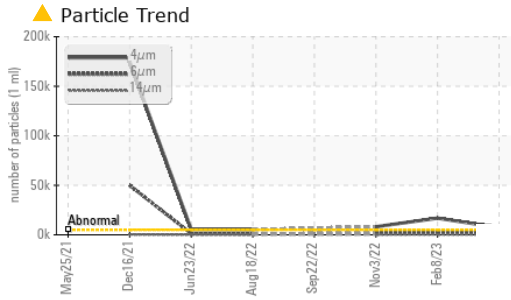
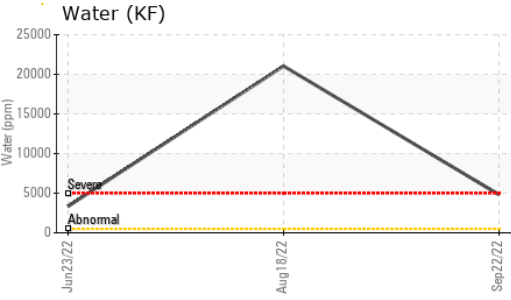
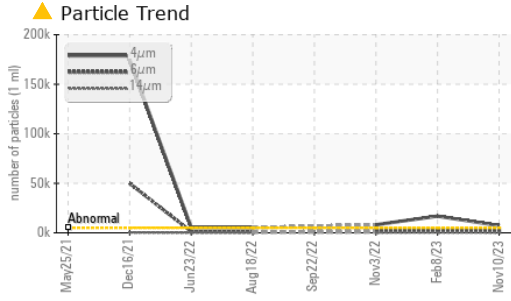
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 7228	▲ 16870	▲ 8138
Particles >6µm	ASTM D7647	>1300	▲ 1807	▲ 3093	▲ 1667
Particles >14µm	ASTM D7647	>160	118	▲ 265	127
Particles >21µm	ASTM D7647	>40	27	▲ 54	37
Particles >38µm	ASTM D7647	>10	2	3	5
Particles >71µm	ASTM D7647	>3	0	1	2
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 20/18/14	▲ 21/19/15	▲ 20/18/14

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	1.5	2.88	2.68	1.49

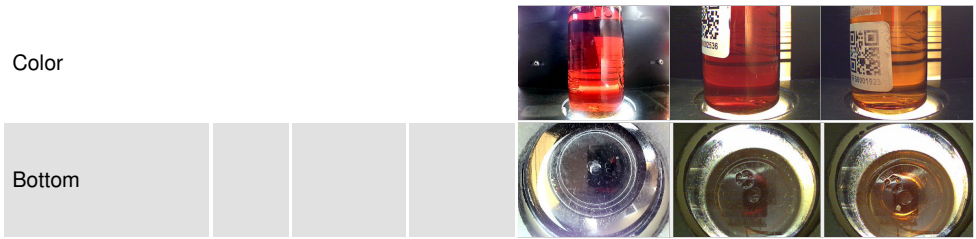
OIL ANALYSIS REPORT



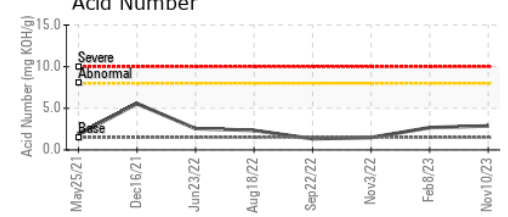
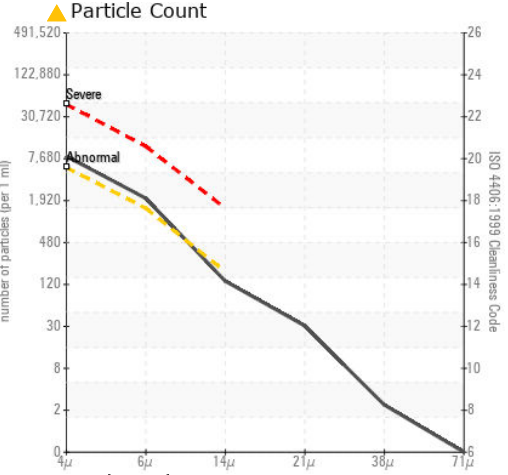
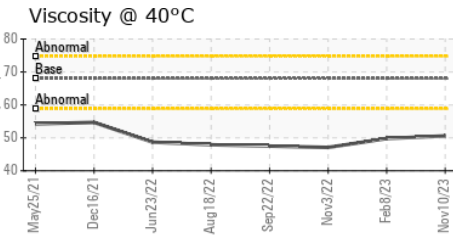
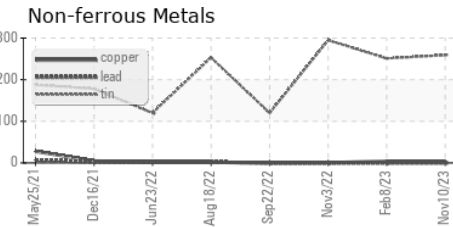
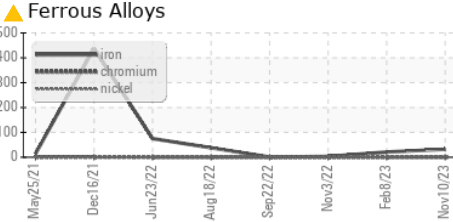
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 68	50.6	49.8	47.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KFS0004868 **Received** : 14 Nov 2023
Lab Number : 06007647 **Diagnosed** : 16 Nov 2023
Unique Number : 10741409 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF)

CONSTELLIUM
 4805 SECOND STREET
 MUSCLE SHOALS, AL
 US 35661
 Contact: Josh Edwards
 joshua.edwards@constellium.com
 T: (256)386-6613
 F:

Certificate L2367
 To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)